WHAT IS CLAIMED IS:

1. A method for counting bacteria, comprising:

preparing an assay sample by staining a specimen using a fluorescent dye, thereby producing a difference in fluorescent intensity between live bacteria and dead bacteria;

detecting optical information from the assay sample; and

classifying and counting the live bacteria and the dead bacteria based on the detected optical information.

2. The method of Claim 1, wherein the fluorescent dye comprises a polymethine dye.

3. The method of Claim 1, wherein the staining is performed at a pH of between about 2.5 and about 4.5.

4. The method of Claim 1, wherein the optical information comprises fluorescent light.

5. The method of Claim 1, wherein the optical information comprises fluorescent light and scattered light.

6. A method for counting bacteria, comprising:

preparing a first assay sample by dividing a specimen into at least two parts and staining a first specimen part using a first fluorescent dye, thereby producing a difference in fluorescent intensity between live bacteria and dead bacteria;

preparing a second assay sample by staining all bacteria in a second specimen part using a second fluorescent dye and a surface-active agent;

detecting a first optical information from the first assay sample;

detecting a second optical information from the second assay sample;

classifying and counting dead bacteria in the first assay sample based on the first optical information;

classifying and counting all bacteria in the second assay sample based on the second optical information; and

calculating a number of live bacteria based on a total bacteria count obtained from the second assay sample and a dead bacteria count obtained from the first assay sample.

7. The method of Claim 6, wherein the first fluorescent dye comprises a polymethine dye.

8. The method of Claim 6, wherein the second fluorescent dye comprises a polymethine dye.

9. The method of Claim 6, wherein the second fluorescent dye is identical to the first fluorescent dye.

10. The method of Claim 6, wherein the surface-active agent comprises a cationic surface-active agent.

11. The method of Claim 6, wherein the staining is performed at a pH of between about 2.5 and about 4.5.

12. The method of Claim 6, wherein the first optical information and the second optical information comprise fluorescent light.

13. The method of Claim 6, wherein the first optical information and the second optical information comprises fluorescent light and scattered light.

14. A bacteria counting apparatus, comprising:

an assay sample preparation unit for preparing an assay sample by staining a specimen using a fluorescent dye, thereby producing a difference in fluorescent intensity between live bacteria and dead bacteria;

a detection unit for detecting optical information from the assay sample; and

an analysis unit for classifying and counting the live bacteria and the dead bacteria based on the optical information detected by the detection unit.

15. The apparatus of Claim 14, wherein the fluorescent dye comprises a polymethine dye.

16. The apparatus of Claim 14, wherein the staining is performed at a pH of between about 2.5 and about 4.5.

17. The apparatus of Claim 14, wherein the optical information comprises fluorescent light.

18. The apparatus of Claim 14, wherein the optical information comprises fluorescent light and scattered light.

19. A bacteria counting apparatus, comprising:

an assay sample preparation unit comprising a sampling device for providing a first specimen and a second specimen from a specimen, the assay sample preparation unit for preparing a first assay sample by staining the first specimen using a first fluorescent dye, thereby producing a difference in fluorescent intensity between live bacteria and dead bacteria, and for preparing a second assay sample by staining all bacteria of the second specimen using a second fluorescent dye and a surface-active agent;

a detection unit for detecting a first optical information from the first assay sample and for detecting a second optical information from the second assay sample; and

an analysis unit for classifying and counting dead bacteria in the first assay sample based on the first optical information, for classifying and counting all bacteria in the second assay sample based on the second optical information, and for calculating a number of live bacteria based on a total bacteria count obtained from the second assay sample and a dead bacteria count obtained from the first assay sample.

20. The apparatus of Claim 19, wherein the first fluorescent dye comprises a polymethine dye.

21. The apparatus of Claim 19, wherein the second fluorescent dye comprises a polymethine dye.

22. The apparatus of Claim 19, wherein the second fluorescent dye is identical to the first fluorescent dye.

23. The apparatus of Claim 19, wherein the surface-active agent comprises a cationic surface-active agent.

24. The apparatus of Claim 19, wherein the staining is performed at a pH of between about 2.5 and about 4.5.

25. The apparatus of Claim 19, wherein the first optical information and the second optical information comprise fluorescent light.

26. The apparatus of Claim 19, wherein the first optical information and the second optical information comprise fluorescent light and scattered light.

27. A reagent kit for counting bacteria, comprising:

a first dilution fluid substantially void of a surface-active agent;

a second dilution fluid comprising a surface-active agent; and

a stain comprising a fluorescent dye.

28. The reagent kit of Claim 27, wherein the fluorescent dye comprises a polymethine dye.

29. The reagent kit of Claim 27, wherein the surface-active agent comprises a cationic surface-active agent.

30. The reagent kit of Claim 27, wherein each of the first and the second dilution fluids has a pH in a range of about 2.0 to about 4.5.

31. The reagent kit of Claim 27, wherein each of the first and the second dilution fluids comprises a nitrous acid reducing agent.